

Davis Creek Reservoir

2011 Fall Survey Summary

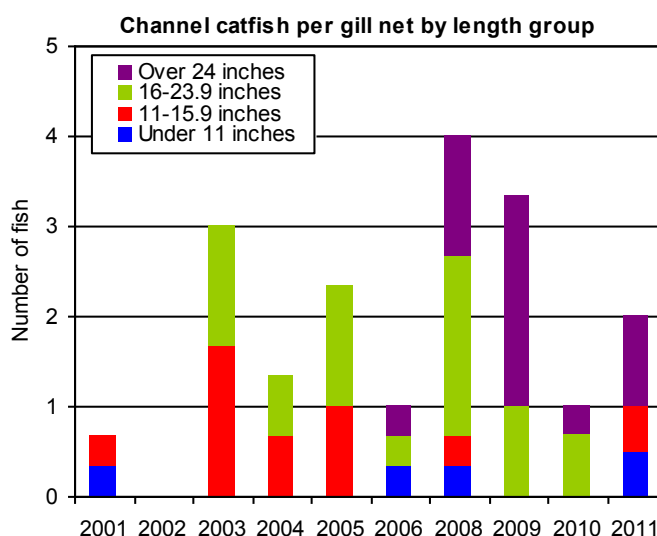
Jeff Schuckman, Northeast Region Fish Manager



The following text and graphs are the result of netting surveys completed during September 2011 at Davis Creek Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Davis Creek using gill and frame nets. Gill nets are used to sample fish species found primarily in open water, such as walleye, while frame nets are used to sample shoreline oriented species, such as crappie. The nets are set each year at approximately the same locations and dates as previous years. This reduces variability and allows for trend comparisons of species abundance and size distribution. The following graphs show the total number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

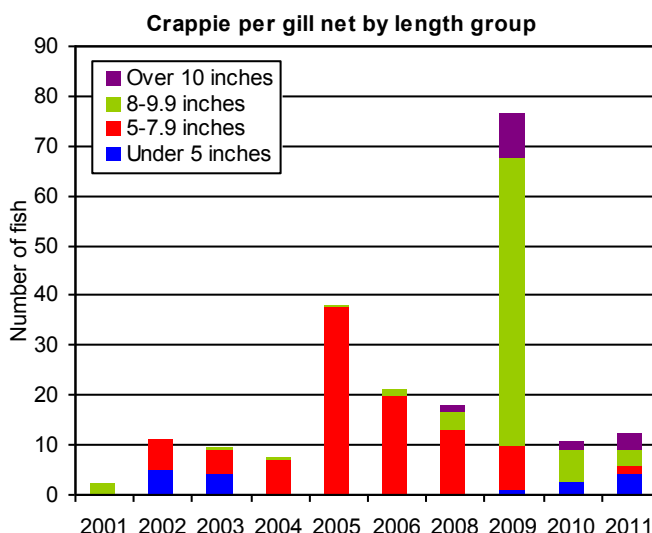
Channel Catfish

Channel catfish abundance has historically been low at Davis Creek Reservoir, as the average catch from 2001 to 2011 is only 1.9 catfish per gill net. The 2011 catch was at the average. At present, Davis Creek contains a few small catfish and a few very large catfish. Future catfish stockings should result in higher numbers of catfish for the angler. Catfish anglers should expect fair fishing success in 2012 and opportunities exist for an occasional trophy size catfish. Anglers are reminded that the daily bag limit for channel catfish was reduced to five fish per day effective January 1, 2011.



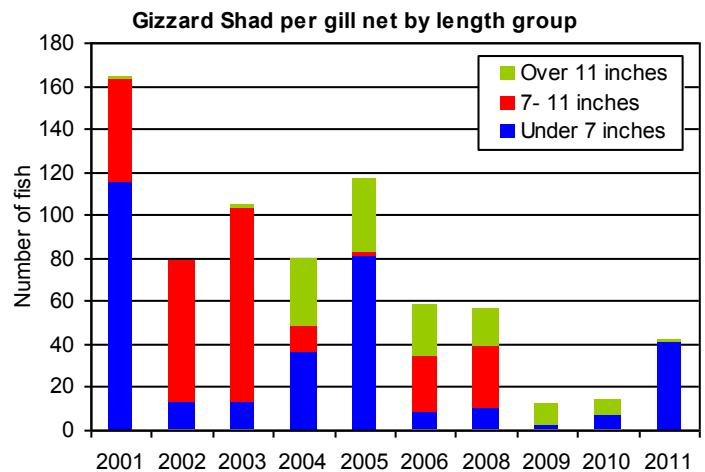
Crappie

Crappie catch has been highly variable the past ten years at Davis Creek Reservoir. The 2011 catch is nearly the same as 2010 and it remains near the long-term average. Multiple size classes were collected indicating steady recruitment. There are fish over ten inches available for anglers in 2012. Anglers should find fair to good angling opportunities while pursuing crappie at Davis Creek Reservoir during 2012. Anglers are reminded that the statewide bag limit for panfish was reduced to 15 fish per day effective January 1, 2011.



Gizzard Shad

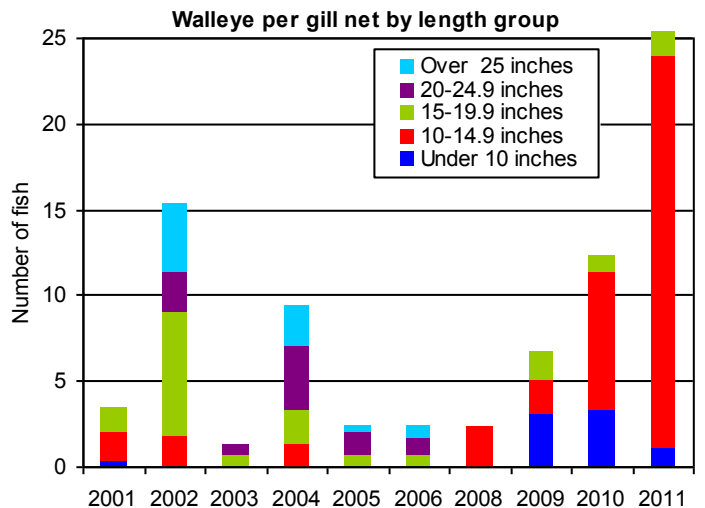
The gizzard shad population is monitored because they serve as the primary food source for walleyes, white bass, and wipers at Davis Creek. Shad abundance was very high from 2001 to 2008, declined in 2009 and 2010 and is once again high in 2011. There has also been a shift in size structure, as no 7 to 11 inch shad have been collected during the last three surveys. The size distribution of the current shad population is preferable. High numbers of young-of-the-year shad provide excellent prey, providing for good growth rates for sport fish species. A build-up of intermediate sized shad can result in competition with sport fish and the opposite result.



Walleye

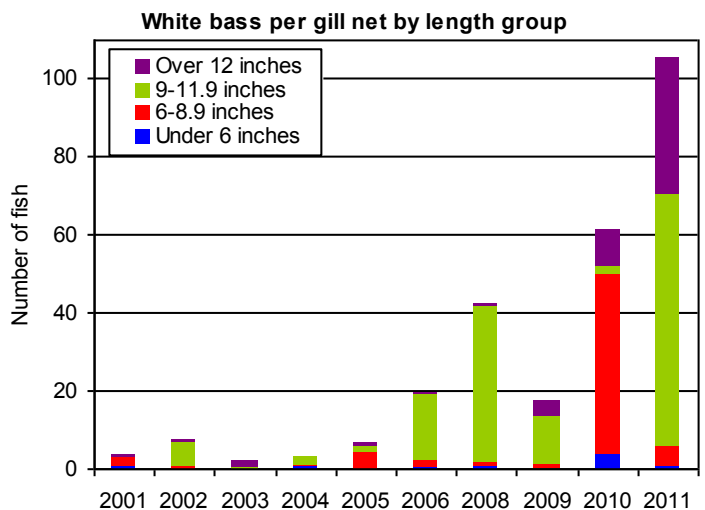
Walleye net catch has greatly improved the past three years with the 2011 mean net catch double the 2010 rate. Walleye from the 2009 and 2010 year-classes still contribute the majority of the fish from the survey. Fish from the 2009 year-class ranged from 14 to 16 inches and should contribute to the harvest during 2012. There were no walleye larger than 20 inches collected.

Based on the survey data, it appears that stocking walleye fingerlings is improving walleye densities at Davis Creek. The two strong year-classes produced should provide excellent angling opportunities for the next several years. The contribution of the 2011 stocking will be evaluated in 2012 when they are age 1 fish.



White Bass

The 2010 white bass catch was the highest in ten years. Fish were captured in all size categories with excellent numbers of 9-13 inch fish. Abundant prey in the form of age 0 gizzard shad have led to very good growth rates for white bass. Good angling success on white bass was experienced during 2011 at Davis Creek and this should continue into 2012. Excellent opportunities should exist for large white bass.

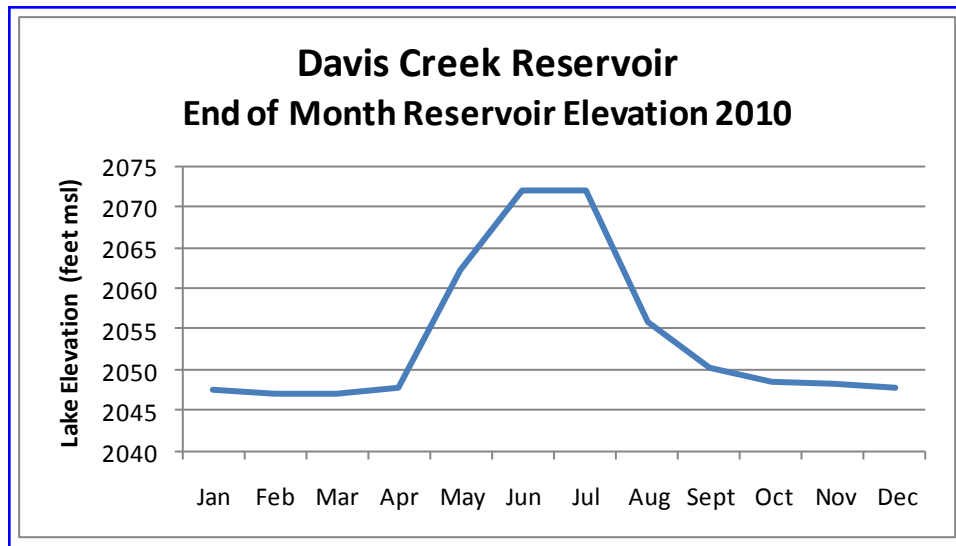


Wipers

Wipers were first stocked at Davis Creek in 2009, and another stocking occurred in 2010. Wipers from the 2009 stocking were collected during the 2009 survey, but no wipers were sampled in the 2010 netting survey. Eight wipers were collected in the 2011 gill net sample and all were from the 2010 year class. The fish were from 13 to 14 inches in length. Wipers are being stocked to utilize abundant prey species available in Davis Creek Reservoir and to provide additional angling opportunities.

Additional Information about Davis Creek Reservoir

Typical of irrigation reservoirs in Nebraska, fluctuating water levels have a large impact on available aquatic habitat at Davis Creek Reservoir. Shoreline habitat is best when the reservoir is near conservation pool and reduced when the reservoir is low in the fall and winter. The addition of deep water habitat structures may improve winter survival of shoreline-oriented fish species such as crappie. Current lake elevations can be found on the U.S. Bureau of Reclamation website: http://www.usbr.gov/gp-bin/arcweb_dane.pl



Fish stocking in 2011 consisted of 56,090 walleye fingerlings. Both walleye and wiper fingerlings are requested for stocking in 2012.

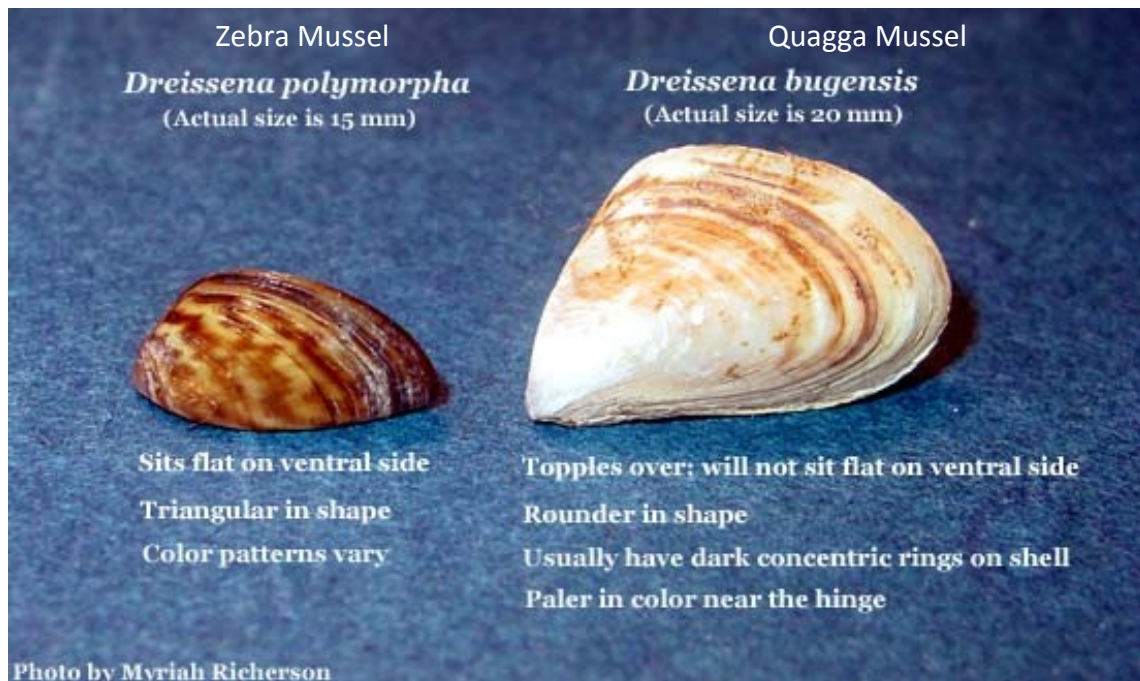
Information regarding camping facilities at Davis Creek Reservoir can be found at Lower Loup NRD's website: <http://www.llnrd.org/recreation.html>



Zebra & Quagga Mussels

Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes. While no mussels have been identified at Davis Creek Reservoir, zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in Kansas and Colorado. Monitoring was completed at several Nebraska reservoirs during 2011 and no evidence of mussels were found.

Invasive mussels will attach to almost any surface and have detrimental impacts on industry (power plants, water intakes, irrigation, etc), native fish and mussels, and recreational users (fouling boat motors, impacting beaches, etc). Invasive mussels cause an estimated \$5 billion per year in economic impacts in the United States for monitoring and control efforts. Inadvertent transfer by humans is the major source of new infestation for zebra and quagga mussels; primarily by boats, boat trailers, and fishing gear. Boaters and anglers are reminded that it is important to **clean, drain and dry** their equipment and boats before moving to different bodies of water. Anglers and boaters are encouraged to educate themselves on these and other aquatic invasive species. An excellent source of information regarding invasive species can be found on the University of Nebraska's Invasive Species Project website: <http://snr.unl.edu/invasives/>.



For additional information about fisheries management at Davis Creek Reservoir, please contact the NGPC Norfolk office at 402-370-3374, or by email at the addresses listed below.

District Manager: Jeff Schuckman, jeff.schuckman@nebraska.gov
Biologist: Phil Chvala, phil.chvala@nebraska.gov